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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,183	10/30/2000	Keith E. Moore	10992596-1	1654

22879 7590 06/28/2004

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EXAMINER	
HUA, LY	

ART UNIT	PAPER NUMBER
2135	4

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

C

Office Action Summary	Application No.	Applicant(s)	
	09/702,183	MOORE, KEITH E.	
	Examiner	Art Unit	
	Ly V. Hua	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-17 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2,3.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
   .a . The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
   a. Regarding claim 1: .
      i. The phrase "such that" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.
      ii. The body of the claim does not support the goal set forth in the preamble.
         (1) Notice that the preamble is set forth to claim authenticating a document but the body of the claim does not recites any combination of steps that results in a document being authenticated.
            (a) The generating step results in a document key being generated, rather than a document being authenticated.
            (b) The imparting step results in an original image being imparted onto the physical media, rather than a document being authenticated.
         (2) Notice also that it is not clear how the combination of the two steps recited in the claim results in authentication of a document.
      iii. It is not clear how the imparting of the original image onto the physical media causes the original image to have the ability of recovering the document key.
         (1) Notice that the manner in which the original image is imparted so that it enables recovery of the document key is not clear.
      iv. It appears that the two steps recited in the claim have no interaction and thus lack coherency.
      v. It is not clear as to how the document key can be generated by "examining" the physical attributes of the physical media. Due to such vagueness of the word "examining" the examiner will treat (in the art rejection herebelow) the document key as just the physical attributes of the physical media.
      vi. The term "an original image" is not clear as to what it represents.
   b. Regarding claims 2 and 8:
      i. The recitation of this claim still does not clarify how the document is authenticated.
      ii. It appears that the steps recited in claims 2 and 8 do not further limit the imparting of an original image onto the physical media.
         (1) Notice that:
            (a) It is not clear whether the result of the encoding step is the original image -- (But if it does, then the original, being encoded with the digital signature, would not remain as the original image. If this is the case, then it is not clear how the original image can be imparted onto the physical media since it has been encoded. The applicant is to clarify this problem so as to avoid confusion in claims 2 and 8).
   c. Regarding claim 3:
      i. The usage of the word "as" at line 3 is confusing. Since the document key and the original image are two different entities, it is not clear how the imparting/printing of the document key onto the physical media can be "as" the original images.
   d. Regarding claim 4:
      i. The media into (or onto) which the document key is stored is not clear.
      ii. The purpose for which a description of the document is recorded along with the document key is not clear.
   e. Regarding claim 5:
      i. Claim 5 recite the step of obtaining a recovered document key from the original image, but it is not clear as to whence the document key comes to exist in the original image. It appears that claim 5 is missing an essential step.
   f. Regarding claims 6-14:
      i. These claims depend on and thus inherit the problems of indefiniteness from their claims which have been addressed above.
   g. Regarding claim 15:
      i. The phrase "the predetermined" lacks antecedent basis. Perhaps a noun is missing from the phrase since the word "predetermined" is more of an adjective, rather than a noun.
   h. Regarding claim 16:
      i. It is not clear as to:
         (1) the meaning of the term "original image" since what the "original image" represents is not clear;
         (2) how the examination and detection of the physical attributes of a physical media can possibly form the document key .

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 5, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Pease (5,647,003).

a. Claim 1 claims a method for authenticating a document, comprising the steps of: i. generating (1) a document key (2) by examining (a) one or more physical attributes (i) of a physical media that underlies the document; **ii. imparting** **(1) an original image** (2) onto the physical media/[paper] (3) such that the original image enables recovery of the document key.	b. <u>As to claim 1:</u> i. Since the generating step and the imparting step have no relationship with each other, and (1) since it appears that the recovery of the document key has not influence by the original image imparted onto the physical media, the examiner interprets that it does not matter how the original image is imparted (i.e., exposed- or passing-onto as in printing with a printer on the physical media), certain the physical attribute of the physical media would not be affected by such printing/imparting; and (2) since imparting (i.e., exposing or passing-onto as in printing with a printer) an original image of a document onto the physical media that underlies the document is not new in the art since printing images onto paper a common practice and it is how documents are made, the examiner will focus on: (a) the generation of the document key, which generation is done by: (i) by examining 1) one or more physical attributes a) of a physical media i) that underlies the document. ii. Pease (5,647,003) teaches [see for example his Brief Summary Text, paragraphs 2 and 6]: (1) authenticating (a) a document (b) by : (i) examining [by using a transmissivity device] 1) physical attribute [i.e., randomly varying opacity characteristic] a) of a physical media [e.g., paper] i) that underlies the document; and (ii) (inherently) imparting (i.e., exposing or passing-onto as in printing with a printer), [which imparting is inherent because to document must be imprinted/imparted with an image otherwise it just remain a piece of paper, and because Pease calls the item being authenticated as a "document"] 1) an original image 2) onto the physical media/[paper]. iii. It is apparent the from Pease's Brief Summary Text [paragraphs 2 and 6] that: (1) the physical attribute [i.e., the randomly varying opacity of his paper] would not be affected even when the paper has been made into a document since Pease's opacity test process can be repeated and new resulting opacity values can be generated so as to have for comparing them with those that have been stored.

c. Claim 3 claims that the method of claim 1, wherein the step of imparting comprises	d. <u>As per claim 3:</u> i. Pease teaches

i. the step of (1) printing (a) the document key (b) on the physical media (c) as the original image.	(1) printing [i.e., recording] (a) [somewhere] on the physical media [i.e., the paper] (b) the document key [i.e., the resulting opacity values] (i) which document key will be used 1) as the original image [i.e., the stored values] 2) for authentication purpose.

e. Claim 5 claims that the method of claim 1, further comprising the step of i. verifying (1) the document (2) by performing the steps of: (a) generating (i) the document key (ii) by examining 1) the physical attributes a) of the physical media; (b) obtaining (i) a recovered document key (ii) from the original image; (c) comparing (i) the document key (ii) to the recovered document key.	f. <u>As per claim 5:</u> i. Pease (5,647,003) teaches [see his Brief Summary Text, paragraphs 2 and 6] (1) verifying (a) an authenticated document (b) by performing the steps of: (i) generating 1) the document key [i.e., the resulting opacity values] 2) by examining [by a transmissivity device] a) the physical attributes [e.g., randomly varying opacity characteristic] i) of the physical media [e.g., paper]; (ii) obtaining [by repeating the opacity test process] 1) a recovered document key 2) from the original image [at this point the examiner interprets this image as a representation of the document key and sees that the image is the values representing the physical attributes of the physical media, which values have been stored/record/written]; (iii) comparing 1) the document key [obtained by repeating the generating step] 2) to the recovered document key [obtained by reading out].

g. Claim 9 claims that the method of claim 1, wherein the physical media is paper.	h. <u>As per claim 9:</u> i. Pease teaches that the physical media for his document is paper.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
.(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
.1. Determining the scope and contents of the prior art.
.2. Ascertaining the differences between the prior art and the claims at issue.
.3. Resolving the level of ordinary skill in the pertinent art.
.4. Considering objective evidence present in the application indicating obviousness or non-obviousness.

7. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003) as applied to claim 1 above in view of Keronen et al (6,567,530 hereinafter Keronen).

a. Claims 2 and 8 claim that the method of claim 1, wherein the step of imparting comprises
i. the steps of:

(1) generating

(a) a digital signature

(b) using
(i) the document key and
(ii) [either]
1) (claim 2) a private key that corresponds to the document {OR},
2) (claim 8) a shared secret key that corresponds to the document; and

(2) encoding
(a) the digital signature
(b) into the original image.

b. As to claims and 2 and 8:
i. Pease teaches the method of claim 1 as addressed above.
(1) However, Pease,
(a) since he was saying that the resulting opacity values (physical characteristic) are stored and used as reference, without further mentioning that the resulting opacity values is to be manipulated and encoded into the original image.
(b) does not teach the steps of:
(i) generating
1) a digital signature
2) using
a) a document key and
b) a private (or shared secret) key and
(ii) encoding [i.e., embedding]
1) digital signature
2) into the original image.
ii. Keronen et al (6,567,530) teaches:
(1) a method
(a) for authenticating document
(b) comprising the steps of:
(i) generating [by a combination of elements 104 and 108]
1) a digital signature [i.e., encrypted digital signature output from element 108]
2) using
a) a document key [i.e., the output of element 104] and
b) a private (or shared secret) key [i.e., the output of element 106]; and
(ii) encoding [i.e., embedding or composing by a combination of elements 107 and 110]
1) digital signature [from element 108]
2) into the original image [i.e., the output from element 140 (going into element 107), which output is original relative to the output the combination of elements 104 and 108].
iii. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
(1) apply Keronen's teaching to further embed the physical characteristic (which can be converted into digital signature by using an encryption key) such as that of Pease into an original image.
iv. The skilled person would have been motivated to do such application of Keronen's teaching because:
(1) the teaching of Keronen further secures the characteristic of a document that is to be coded into the document for later verification of whether the document is authentic;
(2) the physical characteristic (or document key) of the paper of Pease is a piece of information that is to be used for authentication of his document.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003).

a. 4 The method of claim 1, further comprising the step of i. recording (1) the document key (2) along with a description of the document.	b. As per claim 4: i. Pease teaches [see his Brief Summary Text, paragraph 6]: (1) recording (a) a document key [i.e., the resulting value derived from observing the varying opacity characteristic of a piece of paper/media used for making a document] . ii. However, Pease does not explicitly mention about nay writing of such description of the document. iii. Even thought it is not clear as to what is the purpose of the applicant for recording a description of the document along with the document key is not clear, the examiner attempts to insert at this point that meta data (e.g., a date on which the document was made) associated with a document have been known to be recorded/written with the document. iv. It would have been obvious to a person having ordinary skill in the art to realize that some kind of description is to be written onto the document such as that of Pease, which document is to be authenticated.

9. Claims 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003) in view of common practice in the art.

a. 10,6,11 The method of claim 1, wherein the step of generating a document key comprises the step of
   i. examining:
      (1) (Claim 10) density differences of the physical media.
      (2) (Claims 6 and 7) paper fiber patterns in the physical media.
         (a) The method of claim 6, wherein the step of examining paper fiber patterns comprises the step of
            (i) examining
               1) paper fiber patterns
                  a) (claim 6) in the physical media or
                  b) (claim 7) in each of a set of predetermined areas of the physical media.
      (3) (Claim 11) a unique pattern imparted in the physical media.

b. <u>As per claim 10, 6 and 11:</u>
   i. Pease teaches the method of claim 1 as has been addressed above.
   ii. However, Pease does not explicitly teach:
      (1) that the physical characteristic, being examined from his physical media, is:
         (a) 10 density differences of the physical media,
         (b) 6,7 paper fiber patterns either
            (i) 6 in the physical media or
            (ii) 7 in each of a set of predetermined areas of the physical media or
         (c) 11 a unique pattern imparted in the physical media.
   iii. Official notice is hereby taken that the following is notoriously old and well known in the art:
      (1) authenticating
         (a) a document
         (b) by basing on:
            (i) 10 density differences of the physical media that underlines the document,
            (ii) 6,7 paper fiber patterns either
               1) 6 in the physical media that underlines the document or
               2) 7 in each of a set of predetermined areas of the physical media that underlines the document, or
            (iii) 11 a unique pattern imparted in the physical media that underlines the document.
      (2) The following references are examples of evidences:
         (a) <u>With regard to claim 10, as an evidence for using the density differences of a physical media as physical characteristic for authenticating a document:</u>
            (i) Lawandy et al (5,903,240 hereinafter Lawandy) teaches [see his Abstract; Title; and Detailed Description Text, paragraph 31]:
               1) authenticating
                  a) a document
                  b) by basing on the density differences of the physical media [i.e., the "different thicknesses of the paper substrate"].
         (b) <u>With regard to claims 6 and 7, as an evidence for using the fiber patterns of a physical media as physical characteristic for authenticating a document:</u>
            (i) Merkle et al (5,157,726 hereinafter Merkle) teaches [see his Title; and Detailed Description Text, paragraph 41]:
               1) authenticating
                  a) a document
                  b) by basing on the paper fiber pattern in the physical media [i.e., the "pattern of fibers in the paper"].
         (c) <u>With regard to claim 11, as an evidence for using a unique pattern imparted in a physical media as physical characteristic for authenticating a document:</u>
            (i) Harris (5,871,615) teaches [see his Abstract; Brief Summary Text, paragraphs 10 and 11; Drawing Description Text, paragraph 12; and claim 7.
               1) authenticating
                  a) a document
                  b) by basing on a unique pattern imparted in the physical media.
   iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
      (1) substitute the examining of the physical characteristic of Pease's paper, that underlines a document, with the examining of any other known paper physical characteristic that can be examined for purpose of authenticating the document.
   v. The skilled person would have been motivated to do such substitution because:
      (1) as shown in the above patent references, various kind of paper physical characteristics can be used for authenticating a document.

10. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003) in view of common practice in the art.

a. Claim12 claims that the method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a pattern of a reflective substance in the physical media.

b. Claim 13 claims that the method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a pattern of UV ink in the physical media.

c. As per claims 12 and 13:
- i. Pease teaches the method of claim 1 as has been addressed above.
- ii. However, Pease does not explicitly teach:
  - (1) that the physical characteristic, being examined from his physical media, is:
    - (a) (as claimed in claim 11) a unique pattern imparted in the physical media.
- iii. The limitation of claim 11 has been addressed above, with reference to Harris (5,871,615).
- iv. However, Harris does not teach:
  - (1) that the unique pattern imparted in the physical media is of:
    - (a) (as recited in claim 12) a reflective substance, or
    - (b) (as recited in claim 13) an Ultra Violet ink.
- v. Official notice is hereby taken that the following is notoriously old and well known in the art:
  - (1) authenticating
    - (a) a document
    - (b) by basing on:
      - (i) a reflective substance, or
      - (ii) an Ultra Violet ink.
  - (2) The following references are examples of evidences:
    - (a) With regard to claim 12, as an evidence for a reflective substance of a physical media as physical characteristic for authenticating a document:
      - (i) Mallik (5,128,779) teaches [see his Abstract; and Detailed Description Text, paragraph 7]
        - 1) authenticating
          - a) a document
          - b) by basing on
            - i) reflective substance in the physical media [i.e., reflective material (25)].
    - (b) With regard to claim 13, as an evidence for using a pattern of Ultra Violet (UV) ink in a physical media as physical characteristic for authenticating a document:
      - (i) Lee et al. (6,170,744) teaches [see his Abstract; Brief Summary Text, paragraph 11; and Detailed Description Text, paragraph 14]:
        - 1) authenticating
          - a) a document
          - b) by basing on
            - i) pattern of UV ink.
- vi. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
  - (1) substitute the examining of the physical characteristic of Pease's paper, that underlines a document, with the examining of any other known paper physical characteristic that can be examined for purpose of authenticating the document.
- vii. The skilled person would have been motivated to do such substitution because:
  - (1) as shown in the above patent references, various kind of paper physical characteristics can be used for authenticating a document.

11. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003) in view of common practice in the art.

a. Claim 14 claims that the method of claim 11, wherein the step of examining a unique pattern comprises the step of examining a set of predetermined shapes printed in predetermined positions on the physical media.

b. Claim 15 claims that the method of claim 14, further comprising the steps of:
   i. measuring the predetermined positions and
   ii. encoding the predetermined -------- in the document key.

c. As to claims 14 and 15:
   i. Pease teaches the method of claim 1 as has been addressed above.
   ii. However, Pease does not explicitly teach:
      (1) that the physical characteristic, being examined from his physical media, is:
         (a) (as claimed in claim 11) a unique pattern imparted in the physical media.
   iii. The limitation of claim 11 has been addressed above, with reference to Harris (5,871,615).
   iv. However, Harris does not teach:
      (1) that the unique pattern imparted in the physical media is of:
         (a) (as recited in claim 14) predetermined shapes printed in predetermined positions on the physical media.
   v. Official notice is hereby taken that the following is notoriously old and well known in the art:
      (1) authenticating
         (a) a document
         (b) by basing on:
            (i) predetermined shapes printed in positions on a physical media.
                i)
   vi. With regard to claim 14, as an evidence for using predetermined shapes in a physical media as physical characteristic for authenticating a document:
      (1) Irwin et al (5,621,200 hereinafter Irwin) teaches [see his Abstract; Brief Summary Text, paragraph 18; and claims 38, 64 and 65]
         (a) authenticating
            (i) a document
            (ii) by basing on
               1) a predetermined shape.
   vii. With regard to claim 15:
      (1) Since the merit of Claim 15 cannot be determined due to the problems of indefiniteness as have been mentioned above in the rejection of this claim under 35 USC 112, second paragraph, this claim is here temporarily rejected along with claim 14, until the claim is amended and the merit of this claim can be determined.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being un-patentable over Pease (5,647,003) in view of Sedlak et al (WO 99/08230 hereinafter Sedlak) .

a. Claim 16 claims an apparatus for authenticating a document, comprising:
   i. imager
      (1) that generates
         (a) a set of pixel data values
         (b) in response to a document;
   ii. document key generator
      (1) that generates
         (a) a document key
         (b) by examining
            (i) the pixel data values
            (ii) to detect
               1) one or more physical attributes
                  a) of a physical media that underlies the document
      (2) thereby enabling
         (a) the document key
            (i) to be **imparted**
               1) in an original image
               2) onto the document.

b. Claim 17 claims an apparatus for authenticating a document, comprising:
   i. imager
      (1) that generates
         (a) a set of pixel data values
         (b) in response to a document;
   ii. document key generator
      (1) that generates
         (a) a document key
         (b) by examining
            (i) the pixel data values
            (ii) to detect
               1) one or more physical attributes
                  i) of a physical media that underlies the document
      (2) thereby enabling
         (a) the document key
            (i) to be compared
               1) to a recovered document key obtained from the document.

c. As to claim 16:
   i. Pease teaches [see for example his Brief Summary Text, paragraphs 2 and 6]:
      (1) an apparatus that includes
         (a) an imager [i.e., the transmissivity device]
            (i) that generates
               1) a set of pixel data values [i.e., the resulting opacity values]
               2) in response to a document [that is being sensed by the transmissivity device].
   ii. However, Pease
      (1) does not explicitly teach that the apparatus includes
         (a) document key generator
            (i) that generates
               1) a document key
               2) by examining
                  a) the pixel data values
                  b) to detect
                     i) one or more physical attributes of a physical media that underlies the document
      (2) because Pease says that the resulting opacity values are stored and used as reference, rather than further manipulating it.
   iii. Sedlak et al (WO 99/08230 hereinafter Sedlak) teaches [see his Abstract]:
      (1) a physical characteristic (X) of a medium (1) is coded to form coded form of the physical characteristic, which coded form of the physical characteristic is to be used for authentication purpose, rather than the physical characteristic (X).
      (2) [From such teaching of Sedlak, it is inherent that there is:
         (a) a document key generator
            (i) for generating
               1) the document key {i.e., the coded form of the physical characteristic}
               2) by examining {i.e., coding}
                  a) the pixel data value {i.e., the physical characteristic X}].
   iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:
      (1) further use a generator such as that of Sedlak to manipulate the physical characteristic values of Pease to form a document key; and
      (2) instead of storing and using the physical characteristic values for authentication purpose, using the coded physical characteristic values that have derived from the physical characteristic values.
   v. The skilled person would have been motivated to do such coding of the physical characteristic values because:
      (1) Sedlak clearly teach such operation.

d. As to claim 17:
   i. This claim has limitations that are similarly to those of claim 16 and thus is rejected with the same reason applied thereto.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly V. Hua whose telephone number is (703) 305-9684. The examiner can normally be reached on Monday to Friday from 9:00 AM to 5:30 AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Kim, can be reached on 703-305-4303. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly V. Hua
Primary Examiner
Art Unit 2135

Lvh
June 11, 2004